**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

TQ DELTA, LLC, *Plaintiff*, v. COMMSCOPE HOLDING COMPANY, INC., COMMSCOPE, INC., ARRIS US HOLDINGS, INC., ARRIS SOLUTIONS, INC., ARRIS TECHNOLOGY, INC., and ARRIS ENTERPRISES, LLC, *Defendants*.	Civil Action No.: 2:21-cv-00310-JRG

**COMMSCOPE'S OPPOSITION TO PLAINTIFF TQ DELTA'S MOTIONS
FOR SUMMARY JUDGMENT DIRECTED TO FAMILIES 1 AND 10 (Dkt. No. 347)**

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[1] For simplicity, Exhibits A–Q reference those cited in and attached to TQ Delta's opening motion (Dkt. No. 347).

I.   INTRODUCTION

As to Family 1, CommScope has identified evidence and put forth expert testimony showing that (1) the standard does not require performance of the claim language and (2) the accused products do not practice elements of the claim. Specifically, the claim and the standard are mutually exclusive; the claim requires mapping of symbols to bits, while the standard suggests just the opposite. As a result, the presence of disputed facts renders summary judgment improper.

As to Family 10, it is undisputed that Claim 10 requires the CommScope accused products to be operable to (*i.e.*, configured to) operate in an infringing manner. It is also undisputed that the functionality that TQ Delta relies on is entirely *optional* within the standard, as CommScope's expert explains (*see, e.g.*, Ex. R, Al-Dhahir Reb. Rpt. at ¶¶ 103, 118-119, 136-137). Because Claim 10 requires the accused functionality to be operable in the accused products and the standard is *per se* insufficient to demonstrate infringement, TQ Delta must establish that the accused functionality is enabled in the accused products such that they are specifically configured to infringe. But doing so uncovers a myriad of disputes of fact, including those identified by CommScope's expert, rendering summary judgment of infringement inappropriate.

In the same vein, TQ Delta's motion of no invalidity of Family 10 rests entirely on its concurrent motion to strike Mr. Lanning's alleged improper interpretation of the claim term "SNR margin." As explained in CommScope's response to that motion to strike, filed concurrently, Mr. Lanning did not contradict the Court's construction of the term and did not engage in any impermissible claim interpretation in developing the opinions in his report. He expressly applied this Court's construction—a point he reiterated repeatedly during his deposition. As a result, summary judgment is not appropriate as to this disputed point, either.

For these reasons, multiple genuine disputes of material fact exist that render summary judgment inappropriate. Accordingly, TQ Delta's motion should be denied.

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II.   RESPONSE TO TQ DELTA'S STATEMENT OF ISSUES TO BE DECIDED BY THE COURT

1.   There exist disputed material facts such that TQ Delta is not entitled to summary judgment that the Accused Products infringe claim 36 of the '686 Patent (Family 1).

2.   There exist disputed material facts such that TQ Delta is not entitled to summary judgment that the Accused Products infringe claim 10 of the '354 Patent (Family 10).

3.   There exist disputed material facts such that TQ Delta is not entitled to summary judgment that claim 10 of the '354 Patent (Family 10) is not invalid under §§ 102, 103, and/or 112.[2]

III.   RESPONSE TO TQ DELTA'S STATEMENT OF UNDISPUTED MATERIAL FACTS

Disputed Facts 1-3: CommScope does not dispute facts 1-3.

Disputed Fact 4: CommScope sold and/or offered for sale the following products: 5031NV, the 5168N, the 5168NV, the 5268ac, the BGW210-700 ("BGW210"), the NVG44x series, the NVG589 and the NVG599 (the "Accused Products"). These products include functionality supplied by third parties, which is subject to individualized configuration and use by CommScope, CommScope's customers, and end users. Dkt. No. 347, Ex. D, Brody Op. Rpt. at ¶ 129, 131-132; Ex. S, Cimini Reb. Rpt. at ¶ 66; Ex. R, Al-Dhahir Reb. Rpt. at ¶ 127; Ex. T, Miller Dep. Tr. at 62:4-19; Ex. U, Product Documentation; Ex. V, G.993.2 at iii, 2-3.

Disputed Fact 5-6: These are not statements of fact, but rather legal allegations made by TQ Delta.

Disputed Fact 7: The Accused Products are CPE devices that include a DSL chip supplied by Broadcom. These CPE devices may include DSL and Wi-Fi functionality. Ex. U, Product Documentation.

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[2] TQ Delta's Statement of Issues and request for relief avers that it is entitled to summary judgment that claim 16 of the '988 Patent (Family 10) is not invalid. (*See* Dkt No. 347 at 2 (Issue #3), 24.) On September 2, 2022, TQ Delta confirmed that it is no longer asserting the '988 Patent against CommScope. *See* Ex. W, Sept. 2, 2022 Email. As such, TQ Delta is not entitled to judgment of no invalidity with respect to the '988 patent, which has been dropped from this case.

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Disputed Facts 8-12: CommScope does not dispute facts 8-12.

Disputed Fact 13: TQ Delta has not proven that here are no material differences between the DSL functionality of the Accused Products that use the same DSL chipset. Dkt. No. 347, Ex. D, Brody Op. Rpt. at § XIII.

Disputed Fact 14: CommScope disputes that "with regard to DSL functionality, there are no material differences between the BCM63x68 and BCM63148s." Dkt. No. 278 at 4 (SUMF at ¶ 14). Broadcom's corporate witness testified that "they're different" and that "every generation [of the chip] is different." Dkt. No. 347, Ex. H, Gong-San Yu Dep. Tr. at 90:20-25.

Disputed Facts 15-16: TQ Delta has not proven that the referenced Accused Products are representative of the other referenced Accused Products. Dkt. No. 347, Ex. D, Brody Op. Rpt. at § XIII.

Disputed Fact 17: CommScope does not dispute fact 17.

Disputed Fact 18: CommScope disputes that this was its complete response to Interrogatory No. 14. In its Supplemental Response to Interrogatory No. 14, CommScope represented that "[t]he DSL functionality accused by TQ Delta of infringement is performed by the DSL chipsets in the CommScope Accused Products" which "are designed, developed, and manufactured by Broadcom." CommScope further represented that "based on its current understanding, CommScope ███████████ ███." Dkt. No. 347, Ex. E at 79. While CommScope cannot access Broadcom's source code, it is undisputed that CommScope has its own source code and is able to set its own parameters. Thus, CommScope disputes any implication that the Optional ROC mode is enabled by the Accused Products or that the Accused Products are configured with ROC mode enabled. Ex. R, Al-Dhahir Reb. Rpt. at ¶¶ 95, 96, 99-103.

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Disputed Fact 19: CommScope disputes fact 19 as the cited testimony does not "confirm[] that the ████████████████████████████████ support single latency VDSL with ROC mode and G.INP."

Disputed Fact 20: CommScope disputes fact 20 as the cited testimony does not "confirm[] that all firmware releases for the ████████████████████████ chips provide a standard compliant implementation of the VDSL2 standard." Moreover, CommScope disputes any implication that VDSL2 standard compliance constitutes infringement of Family 10 where ROC is an optional feature of VDSL2. *See* Dkt. No. 278 at (SUMF at ¶ 25).

Disputed Facts 21-24: The ████████ ████████████████████████ ██. Ex. R, Al-Dhahir Reb. Rpt. at ¶ 127. Ex. S, Cimini Reb. Rpt. at ¶¶ 45, 46, 47, 58, 60; Ex. X, Cassiers Dep. Tr. at 74:13-17; 94:19-24, 130:3-13; Ex. V, G.993.2 at iii ("to ensure, e.g., interoperability or applicability"). The standards include optional portions that may or may not be present within a given referenced Accused Product or chipset. Ex. V, G.993.2 at iii, 2-3.

Disputed Facts 25-26: CommScope does not dispute facts 25-26.

IV.   **ARGUMENT**

   A.   **There Is a Genuine Dispute of Material Fact Whether Standard Compliance Demonstrates Infringement of Family 1**

The Federal Circuit acknowledges that there are "many instances" in which "an industry standard does not provide the level of specificity required to establish that practicing the standard would always result in infringement." *Fujitsu Ltd. v. Netgear Inc.*, 620 F.3d 1321, 1327-28 (Fed. Cir. 2010). The present case is one such instance. As an initial matter, CommScope's expert Dr. Cimini disputes that the Asserted Claims correspond to mandatory portions of the VDSL2 standard. *See* Ex. S, Cimini Reb. Rpt. at ¶ 58 ("I disagree with TQ Delta's experts that the Asserted Family 1 and Family 4 Claims read on the mandatory portions of the VDSL2 standard."). In addition, with respect to Family 1, the standard does not include the level of specificity required to demonstrate

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infringement of the claims. Specifically, (1) the language of the claims is mutually exclusive with the standard, such that an Accused Product cannot both infringe and comply with the standard; and (2) the standard lacks the detail to demonstrate whether the Accused Products, even if they "comply" with the standard, infringe the claims. *See, e.g., Id.* at ¶¶ 84-85, 87 (describing the incongruencies between the claim language and the language of the standard).

          1.   **The Requirement of "DMT symbols That Are Mapped to One Bit of the Diagnostic Message" Is Inconsistent With the Language of the Standard.**

The language of the VDSL2 standard requires *the opposite* of the language of the claims:

> **12.4.1.1   SOC message mapping during loop diagnostic mode**
>
> In order to increase the robustness of the messages exchanged during the channel discovery and training phases of the loop diagnostic mode, all SOC messages shall be sent using 1 information bit per DMT symbol, where each bit is sent 5 times in 5 consecutive DMT symbols. The mapping of the SOC bits to subcarriers during loop diagnostic mode shall be as summarized in Table 12-72.

Ex. V, G.992.3 at 287. Thus, the standard requires modulation "using 1 information *bit* per DMT *symbol*." This requirement, as further described by the standard, necessarily requires mapping the subject bits to the relevant symbols. *Id.* ("The mapping of the SOC bits to subcarriers during loop diagnostic mode . . . ."). In contrast, the claim language requires multicarrier modulation with "DMT *symbols* that are *mapped* to *one bit* of the diagnostic message." *See, e.g.*, Ex. S, Cimini Reb. Rpt. at ¶ 84, 85, 87. Mapping a bit to a symbol involves mapping a discrete piece of information to a larger symbol. Many bits can be mapped to a symbol. In comparison, mapping symbols to a bit would involve mapping larger symbols to a discrete bit. These two methods of mapping result in mathematically different values. On a constellation point, for example, 3 minus 2 results in a different value than 2 minus 3. This divergence between the language of the claims and the language of the standard makes it impossible for the Accused Products to practice both the claim language and comply with the standard. Accordingly, compliance with the standard cannot support a finding of infringement—compliance with the standard actually negates infringement.

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2.   The Standard Lacks Sufficient Specificity to Demonstrate Infringement of the Claims.

The claim language requires functionality and details that are not included in the standard. As an example, claim 36 of the '686 Patent (Family 1) requires "wherein one variable comprises an array representing [] frequency domain received idle channel noise information." But the standard is silent as to any requirement of "frequency domain received idle channel noise information," and Dr. Brody again relies on the supposed knowledge of a POSITA to "understand that quiet line noise in the VDSL2 standard is idle channel noise." Dkt. No. 347, Ex. D, Brody Op. Rpt. at ¶ 499. But "idle channel noise information" and "quiet line noise" are two different concepts. This is just one example within the claim of an instance in which simply pointing to the standard does not provide sufficient detail to demonstrate infringement.
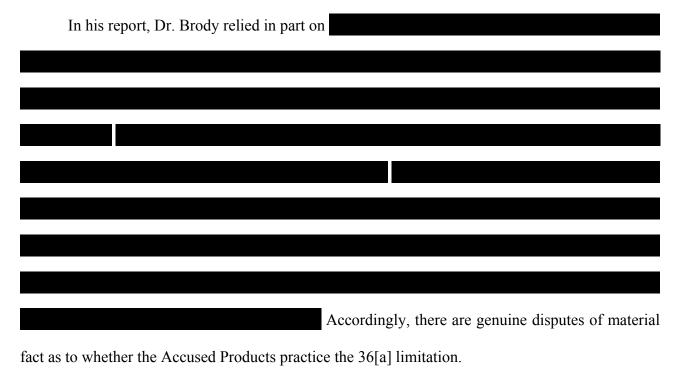
*   *   *

Accordingly, TQ Delta's reliance on the standard is not sufficient to demonstrate infringement. Instead, the caselaw mandates, and TQ Delta seemingly acknowledges, that "the patent owner must compare the claims to the accused products." *Fujitsu*, 620 F.3d at 1328. As described below, Dr. Brody's and Dr. Cooklev's analyses and Dr. Cimini's rebuttal analysis highlight several discrepancies and failures of proof that result in genuine disputes of material fact, rendering summary judgment inappropriate. TQ Delta's motion should be denied.

B.   The Accused Products Do Not, in Fact, Practice the Family 1 Asserted Claims

TQ Delta's generalized statements about Dr. Cimini's opinions ignore the fundamental reality that several disputes of material fact about the Family 1 accused functionality and Accused Products exist, rendering summary judgment inappropriate. First, review of the opposing reports reveals a significant number of factual disputes among the experts. Specifically, Drs. Cimini and Overby disagree with the underlying analysis that forms Dr. Brody's and Dr. Cooklev's infringement opinions for each claim limitation. As an example, Dr. Overby provided his opinion that Dr.

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Cooklev's source code analysis failed to consider and/or does not properly consider the relevant conditionals. Ex. Y, Overby Reb. Rpt. at 57, 77. As another example, Dr. Cimini took issue with Dr. Cooklev's testing and opined that "Dr. Cooklev's testing does not show that the 5168NV would ever enter the loop diagnostic mode as it is deployed by CommScope customers." Cimini Reb. Rept. at 66. Second, Dr. Brody fails to address relevant evidence that demonstrates noninfringement and makes conclusions that are not rooted in fact, resulting in several instances of failure of proof. *See infra*, Sections B.1., B3, & B.4. "[F]ailure of proof precludes summary judgment in favor of plaintiff on its infringement claims." *Mannatech, Inc. v. Glycobiotics Int'l, Inc.*, No. 3-06-C W-0471-BD, 2007 U.S. Dist. LEXIS 91946, at *15 (N.D. Tex. Dec. 14, 2007). These fundamental factual disagreements and failures of proof highlight the prolific genuine disputes of material fact present in the opposing experts' infringement opinions.

1. There Are Genuine Disputes of Material Fact Regarding Whether the Accused Products Infringe the 36[a] Limitation

In his report, Dr. Brody relied in part on ██████████████████████

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2.   There Are Genuine Disputes of Material Fact Regarding Whether the Accused Products Infringe the 36[b] Limitation[3]

As described above, the claims require that "multicarrier modulation with DMT symbols that are mapped to one bit of the diagnostic message" (claim limitation 36[b]). While Dr. Brody opined that the Accused Products practice this limitation, Dr. Cimini disagreed and opined just the opposite. Ex. S, Cimini Reb. Rpt. at ¶¶ 84, 85, 87. Specifically, Dr. Cimini opined that "It is my opinion that the CommScope Accused Products do not use 'multicarrier modulation with DMT symbols that are mapped to one bit of the diagnostic message.' Instead, the CommScope Accused Products use

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████████████████" Ex. S, Cimini Reb. Rpt. at ¶ 82. Indeed, there is no dispute that the Accused

Products ██

██ Ex. Z, Cooklev Rpt. at ¶ 679. ████

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████████████████████████████████ As described by Dr. Cimini, the evidence demonstrates

noninfringement.

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[3] CommScope addresses TQ Delta's motion to strike this noninfringement opinion in its opposition to Plaintiff TQ Delta LLC's Motion to Strike Portions of the Non-Infringement Report and Opinions of Defendants' Expert, Dr. Leonard J. Cimini, Jr. (Dkt. No. 339). For the reasons described therein, this opinion should *not* be stricken and forms a valid noninfringement defense.

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3.   There Are Genuine Disputes of Material Fact Regarding Whether the Accused Products Infringe the 36[d] Limitation

Without any technical basis for doing so, Dr. Brody simply concludes that the claimed idle channel noise information is equivalent to QLN information. Dkt. No. 347, Ex. D, Brody Rpt. at § XVI.A.1.e (BGW210) and § XVI.D.1.e (5268AC). Specifically, it is Dr. Brody's opinion that, based on review of *an ATIS definition* of idle channel noise and G.993.2's definition of quiet line noise, "a POSITA would understand that quiet line noise in the VDSL2 standard is idle channel noise." Ex. D, Brody Rept. at ¶¶ 47, 269, 499. This analysis is insufficient to support the statement that a POSITA would believe they are the same in wireline communications. Instead, while the ATIS, Alliance for Telecommunications Industry Solutions, definition is related to wireless communications systems, VDSL2 requires an actual wire. Dr. Brody cannot summarily conflate the character of noise in these two different technical domains. Tellingly, the standard ████████████████████████████ ███████████████████████████████████████ Such a failure of proof creates a genuine dispute of material fact that cannot survive summary judgment.

C.   TQ Delta Cannot Meet Its Burden With Respect to Infringement of Family 10

Claim 10 of the '354 patent requires a "[a] multicarrier communications transceiver *operable to*" perform the functionality of the claim. The Court's Claim Construction Order makes clear that the term "operable to" should be construed to refer to being *configured* to operate in the recited manner. Dkt. No. 169 at 20. Therefore, for CommScope to infringe Claim 10, TQD must prove that the Accused Products are configured to perform the accused functionality—ROC mode ("ROC"). Yet, TQ Delta has failed to adduce any evidence establishing that the CommScope Accused Products are *configured* with optional ROC mode enabled.

Moreover, *only* when the optional single latency with ROC mode is enabled can the target signal-to-noise ratio (SNR) margins for the two latency paths be set to different values. *See* Ex. AA, Brody Dep. Tr. at 144:4-20; Ex. R, Al-Dhahir Reb. Rpt. at ¶ 163. The record contains no evidence

regarding these settings. TQ Delta does not assert, much less establish, that ROC mode is enabled in the Accused Products or that the SNRMOFFSET-ROC is set to a non-zero value. Instead, TQ Delta merely alleges that the Accused Products "implement," "include," "support" or "comply" with the VDSL2 and G.INP standards and are capable of operating in an infringing manner. *See, e.g.*, Dkt. No. 278 at 4 ((SUMF at ¶ 19) "the [Broadcom chips] support single latency VDSL with ROC mode"), 14 ("the Accused Products includes the infringing functionality), 15 ("the Accused Products implement VDSL2 and G.INP"), and 15 ("the DSL chipsets implement the Mode 1 and Mode 2 functionality"). Without any evidence establishing that the CommScope Accused Products are specifically configured to infringe Claim 10 of the '354 Patent, TQ Delta's motion for summary judgment of infringement with respect to Family 10 is futile and should be denied.

1. TQ Delta Has Not Shown That the Optional ROC Mode Is Enabled in the Accused Products

It is undisputed that single latency with ROC mode ("ROC") is entirely optional in VDSL2 and when ROC is disabled, there is only one latency pathway for all carriers, and the target margin is the same for all carriers, precluding infringement. Ex. AA, Brody Dep. Tr. at 159:15-22; Ex. R, Al-Dhahir Reb. Rpt. at ¶¶ 103, 118-119, 136-137. Federal Circuit precedent makes clear that when "the relevant section of the standard is optional . . . standards compliance alone would not establish that the accused infringer chooses to implement the optional section." *Fujitsu*, 620 F.3d at 1327. Under these circumstances, "it is not sufficient for the patent owner to establish infringement by arguing that the product admittedly practices the standard." *Id.* Moreover, consistent with the "operable to" claim language, both Modes 1 and 2 of infringement center on whether ROC is *explicitly* enabled. *See* Dkt. No. 347 at 14-15 ("(1) VDSL2 operation with ROC *explicitly* enabled (Mode 1); (2) VDSL2-G.INP operation with ROC *explicitly* enabled (Mode 2)" (emphasis added)). Despite these requirements, TQ Delta's Motion is devoid of the most critical material fact—whether the optional functionality is operable in the Accused Products. Accordingly, TQ Delta has failed to

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meet the threshold showing required for infringement of the '354 Patent, and summary judgment should be denied.

In support of TQ Delta's argument that it is entitled to summary judgment, TQ Delta alleges that: (i) Dr. Brody maps every element of claim 10 to the VDSL2 and G.INP standards, (ii) CommScope's documents state that the Accused Products ██████████████████████████ ███████, (iii) █████████████████████████████████████ ████████ (iv) CommScope ███████████████████████████████ ████████████████████████, and (v) Dr. Cooklev analyzed portions of the source code which Dr. Brody used to opine that the source code demonstrates that the Accused Products include the functionality. Dkt. No. 347 at 14-16. Tellingly, the above evidence offered by TQ Delta is devoid of any allegation, let alone substantiated evidence, such as specific source code citations, that the ROC is explicitly enabled in the Accused Products.

As explained by Dr. Al-Dhahir in his rebuttal report, Dr. Cooklev failed to prove that optional ROC mode was enabled by the Accused Products. Ex. R, Al-Dhahir Reb. Rpt. at ¶¶ 99-103. Specifically, Dr. Cooklev's tests did not capture or intercept the specific VTU-O messages that specify use of the ROC and/or retransmission for G.INP. For example, O-TPS specifies whether ROC is enabled (Ex. AA, Brody Dep. Tr. at 152:3-7) and O-MSG1 specifies the SNR offset value via TARSNRMds (Ex. AA, Brody Dep. Tr. at 147:19-24). Despite Dr. Brody's acknowledging that these two VTU-O messages are sent from the VTU-O to the VTU-R with this critical information, Dr. Brody admits that Dr. Cooklev did not capture O-TPS and O-MSG1 sent by the VTU-O. Ex. AA, Brody Dep. Tr. at 148:12-20, 149:2-6. Dr. Cooklev even admits that ROC is not necessarily enabled. Ex. Z, Cooklev Rpt. at ¶ 825. Yet, he did not capture that O-TPS message that specifies whether ROC is enabled in the Accused Products.

TQ Delta's Motion attempts to explain away these failures by characterizing Dr. Cooklev's

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tests as related only to Mode 3, which TQ Delta argues is not material to this motion. (Dkt. No. 347 at 16). TQ Delta's argument is belied by Dr. Brody's reliance on Dr. Cooklev's testing and/or source code analysis for *all three modes* of infringement in his report. *See, e.g.*, Dkt. No. 347, Ex. D, Brody Rpt. at ¶¶ 314, 333-334, 352-354, 367, 380-382, 395-397, 405, 414. Dr. Brody even testified that he relied on Dr. Cooklev's testing to form his infringement opinions laid out in his report. Ex. AA, Brody Dep. Tr. at 34:18-35:10, 157:3-9.

To put it simply, TQ Delta has not established that the Accused Products are operable to infringe as required by Claim 10. Rather, TQ Delta's theory for summary judgment rests entirely on whether the Accused Products are standard compliant. As described above, the Federal Circuit has made clear that when "the relevant section of the standard is optional . . . standards compliance alone would not establish that the accused infringer chooses to implement the optional section." *Fujitsu*, 620 F.3d at 1327. Thus, TQ Delta has provided no evidence that the optional ROC feature is explicitly enabled in the Accused Products. Without such a showing, TQ Delta cannot meet its burden to establish that there are no genuine issues of material fact nor that it is entitled to summary judgment as a matter of law.

2.   TQ Delta Has Not Shown That SNRMOFFSET Is Set to a Non-Zero Value

Additionally, there is another dispute of material fact over whether the Accused Products have a single SNR margin or different SNR margins across the plurality of carriers. *See* Ex. R, Al-Dhahir Reb. Rpt. at ¶ 104-106, 160-167. As an initial matter, the VDSL2 standard contemplates that the value of SNRMOFFSET-ROCds can be set to 0.0 dB.

> Field #22 contains the value of SNRMOFFSET-ROCds as specified in the MIB. The parameter is defined as the SNR Margin offset for the ROC in the downstream direction. This means that the target margin for the ROC is obtained by adding this value to TARSNRM (i.e., TARSNRM-ROC = TARSNRM + SNRMOFFSET-ROC).
>
> The parameter TARSNRM-ROC is used in the specification of the channel initialization policy (see clause 12.3.7.1).
>
> The value shall be coded as an 16 bit unsigned integer with LSB weight of 0.1 dB. The valid range of values is from 0 to 31 dB with 0.1 dB steps.Field #23 contains the value of INPMIN-ROCds expressed in multiples of T_{4k} as specified in the MIB. The value of INPMIN-ROCds expressed in DMT symbols (as to be used by the VTU-R receiver as specified in clause 9.6), is calculated as follows:
>
>> For 4.3125 kHz subcarrier spacing:
>>
>> INPMIN-ROCds in DMT symbols = INPMIN-ROCds in multiples of T_{4k}.
>>
>> For 8.625 kHz subcarrier spacing:
>>
>> INPMIN-ROCds in DMT symbols = 2 × (INPMIN-ROCds in multiples of T_{4k}).
>
> with T_{4k} as defined in clause 10.4.4.
>
> The parameter INPMIN-ROCds (in DMT symbols) is defined as the required INP_no_erasure value for the ROC (see clause 9.6). The value of field #23 is an integer in the range from 0 to 8.
>
> If the CO does not support a robust overhead channel in the downstream direction, the fields #22 and #23 shall contain a value within the specified valid range for each of the parameters. These values shall be ignored at the receiver.

Ex. R, Al-Dhahir Reb. Rpt. at 62 (annotated). If the SNRMOFFSET-ROC is set to 0.0dB, then TARSNRM-ROC=TARSNRM, which means that the two margins of the latency paths are *equal*, such that the first SNR margin is not different than the second SNR margin. *Id.* at ¶ 164.

As discussed above, Dr. Cookev did not establish the contents of O-MSG1, which includes Field #22 containing the value of SNRMOFFSET-ROC. And Dr. Cooklev did not cite any part of the CommScope source code showing what the value of the SNRMOFFSET-ROC is set to by default. Without examining the contents of O-MSG1, Dr. Cooklev and Dr. Brody failed to provide any evidence that the Accused Products are operable to (*i.e.*, configured to) receive two different SNR margins. Thus, a dispute of material fact exists, and summary judgment should be denied. *Id.*

TQ Delta's argument to the contrary flouts the Court's Claim Construction Order and the applicable law. Specifically, TQ Delta incorrectly argues that "the claim is directed to what the Accused Products are *capable* of doing without modification of their hardware or source code; not how their parameters have been set at any particular time." Dkt. No. 347 at 19 (emphasis added). The Court (and CommScope) anticipated this exact argument, which led to the Court's construction of "operable to." In particular, in the Court's Claim Construction Order, the Court recognized "that a

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device is *capable* of being modified to operate in an infringing manner is not sufficient, by itself, to

support a finding of infringement." *See* Dkt. No. 169 at 20 (citing *Telemac Cellular Corp. v. Topp*

Telecom, Inc., 247 F.3d 1316, 1330 (Fed. Cir. 2001) (emphasis added). In discussing the construction

of "operable to," the Court quoted a Federal Circuit case emphasizing that a user is "only activating

means that are *already present in the underlying software*." Dkt. No. 169 at 22 (emphasis in original).

Following this logic, the Court held "that the terms 'operable' and 'operable to' should be construed

to refer to being *configured to* operate in the recited manner." Dkt. No. 169 at 20 (emphasis added).

Accordingly, TQ Delta should not be permitted to sidestep its burden to show that the

Accused Products have been specifically configured with a SNRMOFFSET-ROC value that is a non-

zero number, such that the first SNR margin will be different than the second SNR margin. Mere

capability of two different margins by virtue of a non-zero SNRMOFFSET-ROC value is insufficient

and goes directly against this Court's claim construction. Given that this Court is the sole arbiter of

claim construction disputes, TQ Delta's argument should be swiftly rejected. *See Exergen Corp. v.*

Wal-Mart Stores, Inc., 575 F.3d 1312, 1321 (Fed. Cir. 2009) ("No party may contradict the court's

construction to a jury.").

D.   TQ Delta Is Not Entitled to Summary Judgment of No Invalidity for Family 10

TQ Delta's motion also seeks summary judgment of no invalidity for Family 10, but that

portion of the motion rests entirely on the arguments made in TQ Delta's Motion to Strike the

Invalidity Report of Defendants' Expert, Mark Lanning. Dkt. No. 338. CommScope has concurrently

filed its opposition to that motion explaining why it should be denied, and those same reasons apply

equally here.

Most notably, TQ Delta's argument is based on an allegation that Mr. Lanning incorrectly

applied the Court's claim construction during his invalidity analysis by applying a construction of

the claim term "SNR margin" that differs from the Court's construction of that term. Dkt. No. 347 at

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20; Dkt. No. 338 at 4. But as explained in CommScope's opposition, Mr. Lanning consistently relied on and applied the Court's construction of the term "SNR margin" in developing the opinions in his report. Indeed, in his report, Mr. Lanning expressly acknowledged that he reviewed and applied the Court's claim construction, and he emphasized the same point during his deposition testimony. TQ Delta's motion to strike is nothing more than a mere attempt to manufacture a claim construction dispute based on Mr. Lanning's deposition testimony despite his assurance that he had applied the court's construction throughout his analysis. Ex. BB, Lanning Dep. Tr. at 86:2-12 ("I want to be very clear, I have taken the Court's construction and used it in all of my analysis. . . . I've used it word for word."). As such, and for the reasons explained in CommScope's opposition to TQ Delta's motion to strike, TQ Delta's motion for summary judgment of no invalidity should be denied.

Moreover, the premise of TQ Delta's motion is incorrect: "There is no invariable requirement that a prior art reference be accompanied by expert testimony." *Versata Software, Inc. v. Internet Brands, Inc.*, 902 F. Supp. 2d 841, 848 (E.D. Tex. Oct. 9, 2012) (citing *In re Brimonidine Patent Litig.; Allergan, Inc. v. Exela Pharmsci Inc.*, 643 F.3d 1366, 1376 (Fed. Cir. 2011)). Where the references and the patentee's invention are "easily understandable without the need for expert explanatory testimony," such testimony is not essential. *Versata*, 902 F. Supp. 2d at 848; *see also See, e.g., Wyers v. Master Lock Co.*, 616 F.3d 1231, 1242 (Fed. Cir. 2010); *Intercontinental Great Brands LLC v. Kellogg N. Am. Co.*, 869 F.3d 1336, 1348 (Fed. Cir. 2017).

The issues presented by the '354 patent concern basic and readily understandable technology relating to digital subscriber line ("DSL") technology. The patent relates to multicarrier modulation systems having multiple signal-to-noise ratio ("SNR") margins. As the patent describes, the systems modulate a number of bits on each subchannel, and the number of bits depends on the SNR of that sub-channel and the Bit Error Rate (BER) requirement. The SNR margin is simply an "additional parameter that is used to allocate the number of bits per sub-channel." Dkt. No. 347 at 2. The '354

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patent admits that it was well known to allocate a single SNR margin to all subchannels, and the sole

claim of the '354 Patent at issue merely recites assigning different SNR margins to different

subchannels. *Id*. That can be readily understood without the need for expert testimony. As a result,

the Court should deny TQ Delta's Motion of Summary Judgement of No Invalidity regardless of the

disposition of TQ Delta's Motion to Strike.

V.   CONCLUSION

For the reasons set forth above, CommScope respectfully requests that the Court deny TQ

Delta's Motion for Summary Judgment as to Families 1 and 10.

Dated this 6th day of January, 2023

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was filed electronically in compliance

with Local Rule CV-5(a). Therefore, this document was served on all counsel on January 6, 2023.

/s/ Eric H. Findlay
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